

C/022

Attachment H

COVER SHEET (PAGE 1 of 2)

May 1998 CALFED ECOSYSTEM RESTORATION PROPOSAL SOLICITATION

Proposal Title: LOWER AMERICAN RIVER WETLAND SLOUGH COMPLEX AND FLOODPLAIN RESTORATION
Applicant Name: DUCKS UNLIMITED, INC
Mailing Address: WESTERN REGIONAL OFFICE: 3074 GOLD CANAL DRIVE, RANCHO CORDOVA, CA 95670
Telephone: (916) 852-2000
Fax: (916) 852-2200

Amount of funding requested: \$1,975,000 for 3 years

Indicate the Topic for which you are applying (check only one box). Note that this is an important decision: see page of the Proposal Solicitation Package for more information.

- | | |
|---|---|
| <input type="checkbox"/> Fish Passage Assessment | <input type="checkbox"/> Fish Passage Improvements |
| <input checked="" type="checkbox"/> Floodplain and Habitat Restoration | <input type="checkbox"/> Gravel Restoration |
| <input type="checkbox"/> Fish Harvest | <input type="checkbox"/> Species Life History Studies |
| <input type="checkbox"/> Watershed Planning/Implementation | <input type="checkbox"/> Education |
| <input type="checkbox"/> Fish Screen Evaluations - Alternatives and Biological Priorities | |

Indicate the geographic area of your proposal (check only one box):

- | | |
|---|---|
| <input type="checkbox"/> Sacramento River Mainstem | <input checked="" type="checkbox"/> Sacramento Tributary: <u>AMERICAN RIVER</u> |
| <input type="checkbox"/> Delta | <input type="checkbox"/> East Side Delta Tributary: <u> </u> |
| <input type="checkbox"/> Suisun Marsh and Bay | <input type="checkbox"/> San Joaquin Tributary: <u> </u> |
| <input type="checkbox"/> San Joaquin River Mainstem | <input type="checkbox"/> Other: <u> </u> |
| <input type="checkbox"/> Landscape (entire Bay-Delta watershed) | <input type="checkbox"/> North Bay: <u> </u> |

Indicate the primary species which the proposal addresses (check no more than two boxes):

- | | |
|--|---|
| <input type="checkbox"/> San Joaquin and East-side Delta tributaries fall-run chinook salmon | |
| <input type="checkbox"/> Winter-run chinook salmon | <input type="checkbox"/> Spring-run chinook salmon |
| <input type="checkbox"/> Late-fall run chinook salmon | <input checked="" type="checkbox"/> Fall-run chinook salmon |
| <input type="checkbox"/> Delta smelt | <input type="checkbox"/> Longfin smelt |
| <input type="checkbox"/> Splittail | <input checked="" type="checkbox"/> Steelhead trout |
| <input type="checkbox"/> Green sturgeon | <input type="checkbox"/> Striped bass |
| <input type="checkbox"/> Migratory birds | |

COVER SHEET (PAGE 2 of 2)

May 1998 CALFED ECOSYSTEM RESTORATION PROPOSAL SOLICITATION

Indicate the type of applicant (check only one box):

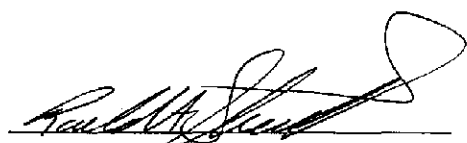
- | | |
|--|--|
| <input type="checkbox"/> State agency | <input type="checkbox"/> Federal agency |
| <input type="checkbox"/> Public/Non-profit joint venture | <input checked="" type="checkbox"/> Non-profit |
| <input type="checkbox"/> Local government/district | <input type="checkbox"/> Private party |
| <input type="checkbox"/> University | <input type="checkbox"/> Other: _____ |

Indicate the type of project (check only one box):

- | | |
|-------------------------------------|--|
| <input type="checkbox"/> Planning | <input checked="" type="checkbox"/> Implementation |
| <input type="checkbox"/> Monitoring | <input type="checkbox"/> Education |
| <input type="checkbox"/> Research | |

By signing below, the applicant declares the following:

- (1) the truthfulness of all representations in their proposal;
- (2) the individual signing the form is entitled to submit the application on behalf of the applicant (if applicant is an entity or organization); and
- (3) the person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section II.K) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.



(Signature of Applicant)

RONALD A. STROMSTAD
DIRECTOR OF OPERATIONS

II. EXECUTIVE SUMMARY

a. Project Title: Lower American River Wetland Slough Complex and Floodplain Restoration

Applicant: Ducks Unlimited, Inc.

b. Project Description and Primary Biological/Ecological Objectives: The Lower American River (LAR) is the reach of the American River located between Nimbus Dam and the confluence with the Sacramento River. The proposed wetland slough complex and floodplain restoration will be developed in the lowest reach of the LAR that is within the tidal influence of the Delta and the backwater effect of the Sacramento River. This section of the river is constrained by levees on either side; however, during flood events, many seasonal wetlands and ponds are created in the floodplain. As the water recedes, the ponds become isolated from the river, leaving juvenile salmonids and steelhead trout stranded.

The key ecological objective for this restoration project is to help restore the natural floodplain and flood processes of the LAR (ERPP, Vol. II, page 304). This objective will be achieved, in part, through the restoration of seasonal wetland habitat types (ERPP, Vol. II, page 307), riparian and riverine aquatic habitat types (ERPP, Vol. II, page 308), and perennial grasslands (ERPP, Vol. II, page 309). Additionally, fresh emergent wetland habitat types will be restored (ERPP, Vol. I, page 9). Specifically, this project will (1) create a wetland-slough complex within the levees of the LAR, and restore and enhance wetland and riparian habitat values among 800 acres within the floodplain; (2) re-contour and provide connectivity among existing sloughs to reduce fish isolation; (3) restore seasonal and fresh emergent wetlands to enhance water quality of urban runoff; and, (4) restore low bypass channels to lengthen the effective hydroperiod of the floodplain terrace.

By restoring wetlands and providing a necklace of wetland sloughs on the upper floodplain terrace, this innovative project will reduce several stressors to the LAR, such as: the effects of unnatural alterations of flows and other effects of water management, channel form changes, degradation of water quality, increases of water temperature, and competition from introduced plants. By alleviating these stressors, this project will reduce fish isolation and provide habitat for juvenile salmonids, steelhead trout, and splittail as well as for many wetland and riparian dependent wildlife species, such as neotropical migratory bird guilds and waterfowl. A thorough, scientific monitoring program is being planned for this project (see below).

c. Approach/Tasks/Schedule: Tasks required to complete this project will occur in three phases. Phase I will consist of project planning, engineering, and design; collecting additional baseline data, especially relating to water quality; securing regulatory compliance, including clearance of the EIR and compliance with county, city, state, and federal requirements, laws, and ordinances; and securing all necessary water rights for successful management of the project. Phase I will occur during the first year of the project.

Phase II will consist of the actual construction and restoration of sloughs and wetlands, installing water control and pumping facilities, and installing plants for habitat restoration. Restoration and construction activities will take place during the second year of the project.

Phase III will entail any additional restoration work and incorporate adaptive management to ensure fulfillment of project objectives; and monitoring any fish stranding, water quality, and restoration success. Phase III will occur in the third year of the project.

d. Justification for Project and Funding by CALFED: Meandering sloughs and by-pass channels once formed an important element of wetland habitat within the LAR. Modern flood control systems have greatly diminished these wetlands, including several historic sloughs on the lower reach of the LAR. This innovative project should serve as a blueprint for the restoration of floodplains that have become high terraces having minimal wetland and aquatic resource values.

The delivery of water through the aquatic infrastructure (wetland slough complex) will provide the basis for the phased development of additional wetland elements, including seasonal wetlands, sedge meadows, and riparian forests. Educational programs are also planned. A second proposal is being submitted to CALFED for the planning of an Environmental Stewardship Center that will be located in the Cal Expo area. The restored floodplain will provide an excellent backdrop for the Center, which will tap into the vast visitor attendance at the State Fair to facilitate environmental education on a statewide, regional, and local basis.

e. Budget Costs and Third Party Impacts: The implementation of this project is compatible with floodplain management and recreational use of the area and thus would have no known adverse third party impacts.

f. Applicant Qualifications: Ducks Unlimited, Inc. (DU) has had 60 years experience with wetland development projects. Its staff includes engineers, biologists, and planners. DU is currently delivering four CALFED Grants. DU will work in close cooperation with H.A.R.T., Inc. H.A.R.T., Inc. has had more than 10 years experience with restoration planning on the Lower American River and is currently delivering a CALFED Grant in the Sacramento San Joaquin Delta.

g. Monitoring and Data Evaluation: An ecological monitoring plan will be developed to address various monitoring elements including: 1) fish isolation before and after project implementation; 2) water quality improvement associated with the installation of constructed wetlands; 3) success of created, restored, and enhanced wetlands, sloughs, and by-pass channels from the perspective of plant establishment; 4) changes in cross-sectional river bedform morphology; and 5) reduction of exotic plants, using replacement with native species as an indicator of success.

h. Local Support/Coordination with other Programs/Compatibility with CALFED

Objectives: The LAR Wetland Slough Complex restoration project is being supported by the Lower American River Task Force (Task Force). Under the aegis of the Task Force, more than 30 stakeholder groups have been working cooperatively since 1994 to facilitate flood control, restoration, and recreational interests in the LAR. A current activity of the Task Force is oversight of a floodway management plan under the direction of the Sacramento Area Flood Control Agency (SAFCA). The plan provides a blueprint for flood control and restoration activities with the LAR from an institutional, policy, and resource perspective. This proposed wetland slough complex is described in the LAR Floodway Management Plan and is endorsed by the Task Force and the Board of the SAFCA.

III. Title Page:

a. LOWER AMERICAN RIVER WETLAND SLOUGH COMPLEX AND FLOODPLAIN RESTORATION

b. Name of Applicant:

Ducks Unlimited, Inc.
Western Regional Office
3074 Gold Canal Drive
Rancho Cordova, CA 95670-6116

Tel: (916) 852-2000 Fax: (916) 852-2200 E-mail: mbias@ducks.org

Principle Investigator:

Michael A. Bias, Ph.D.

c. Type of Organization and Tax Status:

Non Profit (501-C3)

d. Tax Identification Number:

13-5643799

e. Participants/Collaborators:

Jeffery A. Hart, Ph.D., H.A.R.T., Inc.
Cal Expo
Sacramento County Water Resources Division
Sacramento County Department of Parks & Recreation
Sacramento Area Flood Control Agency

IV. PROJECT DESCRIPTION

a. Project Description and Approach

The LAR Wetland Slough Complex and Floodplain Restoration project incorporates elements and objectives of the Sacramento-San Joaquin Delta and the American River Basin target areas. Four primary components of the project are described below.

1. Seasonal Wetland Restoration and Creation of Wetland Sloughs. -- A series of meandering sloughs (approx. 12,000 linear feet) will be created in the Cal Expo and Woodlake area of the Lower American River. The purpose of these sloughs is both to provide wildlife and fisheries habitat, to alleviate isolated water pockets where fish are known to become isolated, and recharge floodplain water storage. This project will deliver water from existing discharge points to new wetlands, existing sloughs, and low flow terraces. The wetland slough complex will begin in the Cal Expo area, where water will be diverted from Chicken and Strong Ranch sloughs, which now enters directly as untreated urban runoff into the American River. Upon entering onto the floodplain, stormwater will be filtered through first passing a series of restored wetlands. After flowing from the restored wetlands, the created sloughs (Figs. 1 and 2) will meander across the terrace, providing a riparian corridor between existing wetlands, ponds, and sloughs (Figs. 1 and 2).

Most of the water for the wetland slough complex will come during the winter, with a lesser amount coming during the dry summer months as urban runoff. Because the upper terraces in this project area flood only infrequently by overbank flooding, the addition of this new source of water will greatly enhance the existing wetlands, as well as providing a water source for the restored seasonal wetlands.

2. Reduction of Fish Isolation. -- Recent surveys have found an abundance of juvenile salmonids trapped in man-made sloughs and remnant ponds in the LAR. Many of the sloughs have elevated channel bottoms or are filled with debris that blocks water from returning to the river. This project will recontour over 4,000 linear feet of existing sloughs and low terrace channels to allow fish to return to the river. The purpose of recontouring the existing sloughs is to eliminate fish isolation by providing an outlet to the American River. To provide the benefits of ponded water for fish rearing and for other wetland values, water control structures will be installed at key locations. Water control structures will allow for the management of seasonal wetlands and allow release of water at appropriate times to facilitate fish re-entry to the River.

3. Seasonal Wetland Restoration for Stormwater Quality Enhancement. -- The principal sources of water for wetland development will be regional stormwater that enters the Parkway via Chicken and Strong Ranch Sloughs, pump 151 and pump 152 (the latter two pumps were formerly natural slough sites). Specially restored wetlands will function as stormwater biofilters. Concepts and systems commonly deployed to enhance water quality include the use of wetlands that include vegetation-fringed ponds, shallow water marshes, seasonally flooded basins, and intermittently wet and dry meadow or scrub brush systems. These systems serve to filter out waterborne debris, silts, and sediments; buffer and help neutralize pH levels; and generally reduce the presence of nitrate, phosphate, iron, chromium, and heavy metals. Another method to control quality stormwater entering into created and constructed wetlands is timing of diversion. For example, first fall urban flood waters could be allowed to continue to flow

directly into the Lower American River, while consequently cleaner stormwater would be diverted into the wetland slough complex.

4. Habitat Creation, Enhancement, and Restoration. -- Several elements of habitat restoration efforts will be included in this project: wetland and slough herbaceous planting, shaded riverine aquatic and riparian planting, exotic plant removal and native perennial grassland restoration. Wetlands and sloughs will be installed with the appropriate plantings, including herbaceous species of sedges, rushes, and tules; shrubs such as wild rose, blackberry, dogwood, and button willow; and trees such as oak, willow, cottonwood, ash, and boxelder. Conceptual diagrams showing these proposed plantings are shown in Figures 1 and 2.

About 40 acres of seasonal wetlands will be restored on the upper terrace of the Cal Expo Floodplain in areas currently occupied by weedy vegetation. These will be associated with the new wetland slough complex. They will be constructed by shallow excavation of the floodplain terrace, and will be sustained by overbank slough flooding. Because the soil consists of a silty loam, the wetlands will likely be managed as seasonal wetlands being flooded for only a limited portion of the winter. A benefit of this flooding would be saturation of the upper floodplain terrace, with subsequent slow release and percolation of water into lower terraces and the American River.

Low lying areas, flooded only during flood events, will also be enhanced by having a more regular source of water. Some of the existing wetlands, such as Bushy Lake, can store additional water during the winter months, with the water being slowly released into low lying areas later in the spring. Other wetlands that will be enhanced include low terrace by-pass channels and sloughs.

Various exotic plants such as giant reed (*Arundo donax*) and yellow starthistle (*Centarea solstitialis*) occupy strategic areas of the Cal Expo floodplain. The growth of exotic plants such as *Arundo donax* accelerate deposition and filling of the existing slough channels and adversely effects the channel ability to provide fisheries habitat. These species will be removed and replanted with native species, including native graminoids (sedge and creeping wildrye) and woody riparian species.

b. Proposed Scope of Work

Tasks required to complete this project will occur in three phases. Schedules (Table 1) and Budgets (Tables 2 – 4) are identified for each Task within each Phase in Section V.

Phase I will consist of project planning, engineering, and design; collecting additional baseline data, especially relating to water quality; securing regulatory compliance, including clearance of the EIR and compliance with county, city, state, and federal requirements, laws, and ordinances; and securing all necessary water rights for successful management of the project. Phase I will occur during the first year of the project.

Task 1. Project planning, design, and engineering. This will involve meetings with government and regulatory officials to identify planning, policy, and regulatory issues that need to be addressed as part of project permitting. Project design will be prepared for general review and final engineering drawings will be constructed. A planting palette for wetlands and slough habitat installation will also be presented.

Deliverables: Final design, engineering, and planting palette.

Task 2. Baseline data collection, water quality, fish stranding data. While habitat mapping at the GIS level has been completed for the area, insufficient information exists regarding water quality of the current slough systems, especially in relationship to the LAR. These gaps will be filled through the collection of baseline data. Deliverables: Preliminary report of monitoring information.

Task 3. Regulatory Compliance. Table 5 lists the regulations, policies, and programs; identifies the responsible regulatory agencies; and lists the agreements, authorizations, and permits that will be obtained. Deliverables: Environmental compliance documents, permits, agreements and authorizations necessary to proceed with project construction.

Phase II will consist of the actual construction and restoration of sloughs and wetlands, installing water control and pumping facilities, and installing plants for habitat restoration. Restoration and construction activities will take place during the second year of the project.

Task 1. Construction of restored wetlands, enhanced wetlands, and sloughs. Deliverables: Documentation of completed earthwork.

Task 2. Installation of pumps and water control structures. Deliverables: Documentation of completed pump work and water control installation.

Task 3. Installation of plant materials. Characteristic wetland, slough and riparian plants will be installed at the appropriate locations relative to elevation, depth and duration of flooding, and need for habitat and species diversity. Deliverables: Documentation of completed plantings.

Phase III will entail any additional restoration work and incorporate adaptive management to ensure fulfillment of project objectives; and monitor any fish stranding, water quality, and restoration success. Phase III will occur in the third year of the project, some baseline monitoring will begin during year 1.

Task 1. Water quality monitoring. Deliverables: Preliminary and final reporting documentation of monitoring information.

Task 2. Fish stranding monitoring. Deliverables: Preliminary and final reporting documentation of monitoring information.

Task 3. Plant installation monitoring. Deliverables: Preliminary and final reporting documentation of monitoring information.

c. Location and/or Geographic Boundaries of the Project

The LAR is a reach of the American River located between Nimbus Dam (below Folsom) and the confluence with the Sacramento River at the City of Sacramento. It is part of a 5,000-acre Parkway administered by the Sacramento County Department of Parks and Recreation. The proposed Wetland Slough Complex and Floodplain Restoration will occur in an 800-acre portion of the lowest reach of the

LAR, from River Mile 2 to 4.9. This area is within the tidal influence of the Delta and is influenced by the backwater effect of the Sacramento River.

d. Expected Benefits

The creation, enhancement, and restoration of a wetland slough complex in the lowermost reach of the LAR will demonstrate creative ways to improve habitat conditions in the LAR in particular and human-altered riverine systems in general. The project's implementation will restore or enhance seasonal and aquatic habitat types, especially within the LAR floodplain; affect components of instream aquatic habitat types, such as water quality and temperature; enhance shaded riverine habitat types; and restore perennial grassland habitat types.

Through enhancement and restoration of these important floodplain habitat components, stressors affecting primary and secondary species are reduced. Alterations of flows and other effects of water management are reduced, especially anadromous fish migration barriers from isolation. Floodplain changes such as hydrological and physical isolation are reduced through recontouring and connecting isolated slough channels. Channel form changes are reduced through recontouring and connecting isolated sloughs, as well as improving and restoring riparian regeneration potential. Shaded riverine enhancements will effect water temperature and redirecting runoff through restored seasonal wetlands improves water quality. Undesirable plant species interactions will be reduced through eradication and improved water control.

This project will provide positive benefits anadromous and resident fish, such as winter-, spring-, and fall-run chinook, steelhead trout, Sacramento splittail, American shad, and striped bass through reduced isolation and enhanced rearing habitat types. Restoration and enhancement of adjoining riparian, wetland, and grassland environments will provide benefits to neotropical migratory birds and waterfowl.

A thorough, scientific monitoring program as part of this proposal will document improvements in fisheries habitat, water quality, and wildlife habitat value. This project will provide further benefits in conjunction with a second proposal to CALFED for an Environmental Stewardship Center, to be located in the Cal Expo area. The restored LAR habitat and resulting ecological diversity will provide an excellent backdrop for the Center, which will tap into the vast visitor attendance at the State Fair to facilitate environmental education on a statewide, regional, and local basis.

e. Background and Ecological/Biological/Technical Justification

CALFED's American River Technical Advisory Committee, created in 1997, recommended a number of actions to improve fisheries conditions and habitat in the LAR. This project directly addresses the wetland-slough complex and SRA (Shaded Riverine Aquatic) Protection/Management elements identified by the committee.

The key ecological objective for this restoration project is to help restore the natural floodplain and flood processes of the LAR (ERPP, Vol. II, page 304). This objective will be achieved, in part, through the restoration of seasonal wetland habitat types (ERPP, Vol. II, page 307), riparian and riverine aquatic habitat types (ERPP, Vol. II, page 308), and perennial grasslands (ERPP, Vol. II, page 309). Additionally, fresh emergent wetland habitat types will be restored (ERPP, Vol. I, page 9).

By restoring wetlands and providing a necklace of wetland sloughs on the upper floodplain terrace, this innovative project will reduce several stressors to the LAR, such as: the effects of unnatural alterations of flows and other effects of water management, channel form changes, degradation of water quality, increases of water temperature, and competition from introduced plants. By alleviating these stressors, this project will reduce fish isolation and provide habitat for juvenile salmonids, steelhead trout, and splittail as well as for many wetland and riparian dependent wildlife species, such as neotropical migratory bird guilds and waterfowl.

The construction of dams (e.g., Folsom and Nimbus dams) have caused loss of the natural sediment supply and gravel necessary for salmonid spawning. This condition has been worsened by the building of levees that restricts natural flooding, resulting in further riverbed degradation. These unnatural flood control activities have caused persistent bank erosion problems and loss of valuable shaded riverine habitat. Lack of historical overbank flooding has diminished natural regeneration of riparian habitat and corresponding floodplain ecosystem values. Recreational and human use of the floodplain has introduced entirely new threats to the riparian system, such as fire, exotic weed invasion, and habitat fragmentation. Urbanization of the watershed has resulted in the conversion of natural tributary sloughs into concrete-lined drainage ditches, with accompanied increases in urban runoff and pollutants. The Cal Expo (Fig. 1) and Woodlake (Fig. 2) floodplain terraces currently provide poor habitat conditions for fish and limited value to other wildlife species. Much of the Cal Expo area is dominated by weedy upland species, such as yellow starthistle and giant reed. A fire several years ago burned much of Bushy Lake area, consequently destroying considerable riparian canopy. Bushy Lake is degraded due to stagnant water resulting from lack of flow-through conditions. The Woodlake area has been farmed for many years; consequently, very limited habitat value exists. These areas have existing man-made sloughs and by-pass channels that strand fish in late winter and early spring. The areas are underlain by loamy soil, are of sufficiently large size (several hundred acres), and show considerable promise for restoration if the site is appropriately re-contoured and adequate water is provided.

To date there has been considerable progress in the development of the ideas proposed in this application. Through a number of planning meetings, the idea has been met with considerable enthusiasm by the Lower American River Task Force, the Cal Expo staff and Board of Directors, Sacramento County Parks and Recreation, Sacramento County Water Resources Division, American River Parkway Foundation, and others. The proposed slough for the Woodlake area has already been developed and accepted in a 1996 update to the American River Parkway plan.

f. Monitoring and Data Evaluation

An ecological monitoring plan will be developed to address various monitoring elements including: 1) fish isolation before and after project implementation; 2) water quality improvement associated with the installation of constructed wetlands; 3) success of created, restored, and enhanced wetlands, sloughs, and by-pass channels from the perspective of plant establishment; 4) changes in cross-sectional river bedform morphology; and 5) reduction of exotic plants, using replacement with native species as an indicator of success.

Fish Isolation/Habitat Use. -- Pre-restoration field sampling and surveying will be conducted in

coordination with state and federal resource agencies to determine existing habitat conditions and fish species present. A physical habitat assessment of the project area will be conducted. Fish collections will be made if appropriate habitat is present. The initial monitoring will provide a baseline for future monitoring efforts to compare the use by native and introduced fishes.

Fish collections will be made with small mesh seine, dipnet, and traps as appropriate for the sites sampled. There will be an attempt to standardize the amount of collection effort as much as possible so that relative abundance can be estimated. The data will be compared with pre-existing conditions of the extant sloughs. The monitoring will make use surveys conducted quarterly to determine the relative abundance of introduced and native fish species that utilize the existing and restored habitats. The results will help determine the types of habitats and design parameters providing the greatest benefit to native fish populations.

Water Quality. -- Urban runoff can contribute petroleum hydrocarbons, pesticides, metals and nutrients to the stormwater system, especially in the first rains of the season. In addition to the County's continued monitoring of contaminants of concern in Chicken Ranch and Strong Sloughs, the California Department of Fish and Game's Water Pollution Control Laboratory will monitor water quality by measuring concentrations of pollutants in the water column and residues that might accumulate in sediment and tissue of aquatic organisms over time and along the continuum of the wetland complex.

Water monitoring in the created wetland sloughs will be designed to coincide with storm events to document the presence of water-soluble contaminants. The presence of persistent chemicals, such as metals, polycyclic aromatic hydrocarbons (PAHs), PCBs, and organochlorine pesticides likely will be determined through sediment sampling on a bi-annual basis.

Monitoring of fish contamination could occur annually to identify any mercury, PCBs, and organochlorine pesticides in fish tissue that could potentially affect fish populations or threaten upper trophic level species through bioaccumulation. Additionally, the aquatic invertebrate community composition will be monitored over time and along the continuum of the wetland complex to assess the possible direct effects of contaminants to the wetland's biological integrity.

Plant Establishment Success/Exotic Plant Removal. -- Pre- and post-construction conditions of the slough wetland complex, areas dominated by exotic weeds, and grassland area will be compared through the use of aerial photography interpretation, and GIS database and mapping techniques. The plants installed in the implementation phase will be carefully documented on an individual basis, being monitored at appropriate times of the year for parameters of survival, health, and growth.

g. Implementability

Table 5 outlines the planning efforts and regulatory issues that will be addressed during the first phase of the project. The approach to obtaining full regulatory compliance will be early and on-going consultation with all the regulatory agencies to identify and address their concerns as early as possible in the planning stage of the project design.

V. COSTS AND SCHEDULE TO IMPLEMENT PROPOSED PROJECT

a. Budget Costs

Total cost to implement this important project is \$1.975 million across three years. Budget details are presented in Tables 2 through 4.

b. Schedule Milestones

This project is scheduled to occur across three years. Timelines for delivering specific Phases and Tasks are presented in Table 6.

c. Third Party Impacts

The implementation of this project is compatible with floodplain management and recreational use of the area. The LAR Wetland Slough Complex restoration project is being supported by the Lower American River Task Force (Task Force). Under the aegis of the Task Force, more than 30 stakeholder groups have been working cooperatively since 1994 to facilitate flood control, restoration, and recreational interests in the LAR. A current activity of the Task Force is oversight of a floodway management plan under the direction of the Sacramento Area Flood Control Agency (SAFCA). The plan provides a blueprint for flood control and restoration activities with the LAR from an institutional, policy, and resource perspective. This proposed wetland slough complex is described in the LAR Floodway Management Plan and is endorsed by the Task Force and the Board of the SAFCA. This project will contribute to the aesthetic value of the American River ecosystem as well as the greater Sacramento metropolitan area. The project will allow for a greater public awareness and appreciation of our state's critical wetland and riverine ecosystems. The project is highly visible and easily accessible to the public, therefore an excellent flagship project to promote the benefits of the CALFED process.

VI. APPLICANT QUALIFICATIONS

DU is the nationally recognized authority on the restoration and enhancement of wetlands. Since its inception in 1937, DU has raised over \$1 billion for restoration and enhancement of over 8 million acres of wetlands in North America. Biological assessment and engineering of this project will be accomplished by staff biologists and engineers from DU and cooperators. Biological evaluation of the project will be conducted by trained biologists from both DU, cooperators, and agency staff. DU office administrative staff will handle organizational, copying, and other related needs. DU maintains a strict policy concerning conflict of interest. DU contract administrators will be responsible for contracts, compliance, and fiscal administration of the project. DU is currently delivering four CALFED Grants, thereby is very familiar with CALFED granting procedures. Abbreviated Vitas for DU personnel involved with this project are attached.

Habitat Assessment & Restoration Team, Inc. will assist DU in the planning, design, and implementation of this project. H.A.R.T., Inc. is a company that has been established to bring a strong scientific basis to restoration. Jeffrey A. Hart, Ph.D., will work closely with DU.- Jeff has had 30 years experience in environmental biology, having worked on several continents in the area of forestry, botany, wildlife biology, genetics, scientific research, arboriculture, and restoration. He graduated in environmental biology from the University of Montana (1971), and holds graduate degrees from University of Montana (1974) and Harvard University (1983). He has published in leading refereed journals, and has taught courses, including restoration ecology, at several universities. In the Sacramento region, he has had considerable success in designing and implementing restoration projects (e.g., Stone Lakes National Wildlife Refuge), biotechnical projects (e.g., Dry Creek, Lower American River), and resource studies (e.g., Cosumnes River, Lower American River). His clients include mostly government agencies and non-profit organizations such as the Sacramento Area Flood Control Agency, Sacramento County Water Resources Division, Ducks Unlimited, and The Nature Conservancy. Ellyn Davis is a planning biologist with 15 years experience in the greater Sacramento area; she will assist H.A.R.T. and DU in securing the necessary permits to implement this project.

VII. COMPLIANCE WITH STANDARD TERMS AND CONDITIONS

DU has administered multiple government contracts with applicable compliance standards (attached).

by
Oates Warrick, Inc.
and
Hedberg Assessment & Restoration Team, Inc.



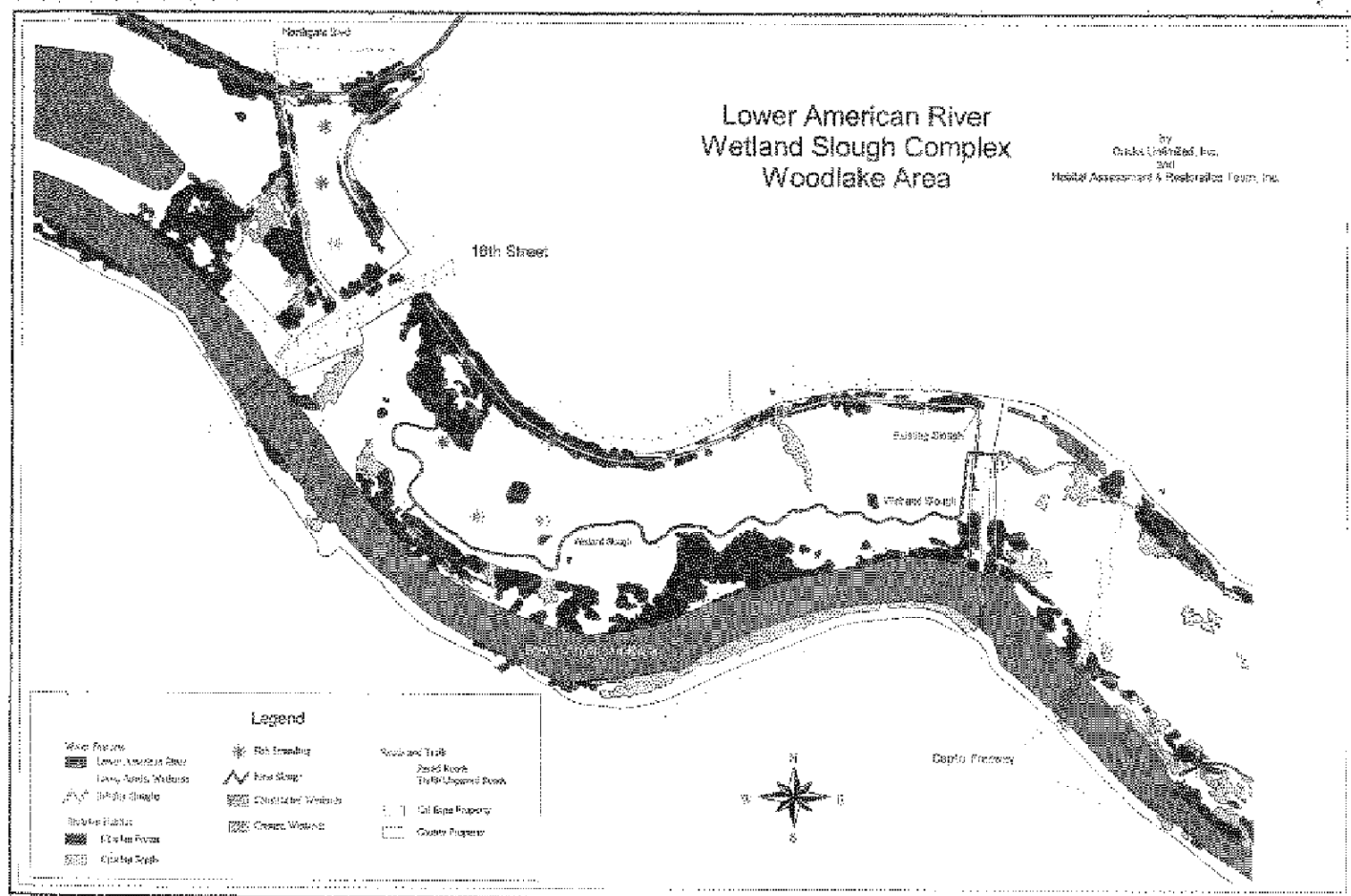


Table 1. Anticipated timeline for specific Phases and Tasks associated with the Lower American River Wetland Slough Complex and Floodplain Restoration.

PROJECT PHASE AND TASK	ANTICIPATED TIMELINE
PHASE I	October 1998 – October 1999
Environmental Documentation and Permitting	October 1998 – October 1999
Water Rights Determination	October 1998 – October 1999
County EIR Review	October 1998 – October 1999
Planting Design	October 1998 – October 1999
Survey, Engineering, and Design	October 1998 – October 1999
Phase I Project Planning and Administration	October 1998 – October 1999
PHASE II	October 1999 – October 2000
Slough Redevelopment	October 1999 – October 2000
Misc. Earthwork	October 1999 – October 2000
Stormwater Treatment Wetlands	October 1999 – October 2000
Gravel Access Roads	October 1999 – October 2000
Water Control Structures	October 1999 – October 2000
Culvert Pipe	October 1999 – October 2000
Bike Path Crossings	October 1999 – October 2000
Pump Station	October 1999 – October 2000
Discharge Piping	October 1999 – October 2000
Riprap	October 1999 – October 2000
Vegetation Control and Plantings	October 1999 – October 2000
Railroad Crossing	October 1999 – October 2000
Construction Management	October 1999 – October 2000
Phase II Project Planning and Administration	October 1999 – October 2000
PHASE III	October 2000 – October 2001 (in general)
Water Quality Monitoring	October 1998 – October 2001
Fishery Monitoring	October 1998 – October 2001
Phase III Project Planning and Administration	October 2000 – October 2001

Table 2. Lower American River Wetland Slough Complex and Floodplain Restoration budget estimates for Phase I.

PROJECT PHASE AND TASK	DIRECT LABOR HOURS	DIRECT SALARY AND BENEFITS (\$)	OVERHEAD LABOR (\$)	SERVICE CONTRACTS (\$)	MATERIAL AND ACQUISITION CONTRACTS (\$)	MISC. AND OTHER DIRECT COSTS (\$)	TOTAL COSTS (\$)
PHASE I							
Environmental Documentation and Permitting				60,000			60,000
Water Rights Determination				50,000			50,000
County EIR Review				35,000			35,000
Planting Design				10,000			10,000
Survey, Engineering, and Design	1,376	62,780	23,220				86,000
Phase I Project Planning and Administration	1,040	47,450	17,550	40,000			105,000
PHASE I SUBTOTAL	2,416	110,230	40,770	195,000			346,000

I - 0 0 9 3 0 4

I-009304

Table 3. Lower American River Wetland Slough Complex and Floodplain Restoration budget estimates for Phase II.

PROJECT PHASE AND TASK	DIRECT LABOR HOURS	DIRECT SALARY AND BENEFITS (\$)	OVERHEAD LABOR (\$)	SERVICE CONTRACTS (\$)	MATERIAL AND ACQUISITION CONTRACTS (\$)	MISC. AND OTHER DIRECT COSTS (\$)	TOTAL COSTS (\$)
PHASE II							
Slough Redevelopment					210,000		210,000
Misc. Earthwork					120,000		120,000
Stormwater Treatment Wetlands					200,000		200,000
Gravel Access Roads					120,000		120,000
Water Control Structures					42,000		42,000
Culvert Pipe					95,000		95,000
Bike Path Crossings					30,000		30,000
Pump Station					150,000		150,000
Discharge Piping					12,000		12,000
Riprap					12,000		12,000
Vegetation Control and Plantings					210,000		210,000
Railroad Crossing					35,000		35,000
Construction Management	1,616	73,730	27,270				101,000
Phase II Project Planning and Administration	800	36,500	13,500				50,000
PHASE II SUBTOTAL	2,416	110,230	40,770		1,236,000		1,387,000

1-009305

1-009305

Table 4. Lower American River Wetland Slough Complex and Floodplain Restoration budget estimates for Phase III.

PROJECT PHASE AND TASK	DIRECT LABOR HOURS	DIRECT SALARY AND BENEFITS (\$)	OVERHEAD LABOR (\$)	SERVICE CONTRACTS (\$)	MATERIAL AND ACQUISITION CONTRACTS (\$)	MISC. AND OTHER DIRECT COSTS (\$)	TOTAL COSTS (\$)
PHASE III							
Water Quality Monitoring				183,000			183,000
Fishery Monitoring				21,000			21,000
Phase III Project Planning and Administration	608	27,740	10,260				38,000
PHASE III SUBTOTAL	608	27,740	10,260	204,000			242,000
GRAND TOTAL	5,440	248,200	91,800	399,000	1,236,000		1,975,000

1-009306

1-009306

Table 5. Regulatory permits and environmental documentation needed for the Lower American River Wetland Slough Complex and Floodplain Restoration.

PERMIT	REGULATORY AGENCY
CWA Section 404 Permit RHA Section 10 Permit NEPA Compliance	Corps of Engineers
CWA Section 402 (NPDES Permit) CWA Section 401 (Water Quality Certification)	Central Valley Regional Water Resources Control Board
ESA Consultation	Fish and Wildlife Service
National Historic Preservation Act 106 Compliance	State Historic Preservation Office
Wild and Scenic Rivers Act Compliance	California Department of Fish and Game
Streambed Alteration Agreement	California Department of Fish and Game
CEQA Compliance	Sacramento County DERA
Land Use Lease/Dredging Permit	State Lands Commission
Encroachment Permit	The Reclamation Board
CESA	California Department of Fish and Game
Utility Line Coordination	California Public Utilities
Railroad ROW Crossing	Union Pacific/Southern Pacific RR
American River Parkway Plan Amendment	Sacramento County Department of Parks and Recreation

Item 11

Agreement No. _____

Exhibit _____

**NONCOLLUSION AFFIDAVIT TO BE EXECUTED BY
BIDDER AND SUBMITTED WITH BID FOR PUBLIC WORKS**

STATE OF CALIFORNIA)

)ss

COUNTY OF Sacramento)

Holly Andree, being first duly sworn, deposes and
(name)

Says that he or she is Director, State and Federal Coordination of
(position title)

Ducks Unlimited, Inc.
(the bidder)

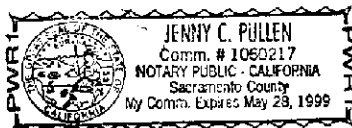
the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

DATED: 7/25/97

By

Holly Andree

(person signing for bidder)



(Notarial Seal)

Subscribed and sworn to before me on

7/25/97

Jenny C. Pullen
(Notary Public)

Vitae in Brief
Robert Daniel Charney, P.E.
Regional Engineering Supervisor
9/16/96

Education & Certification

Registered Professional Engineer, State of California, 1993 #C50768

Master of Science, University of California at Davis, Civil and Environmental Engineering, 1991
Thesis Title: "Salt Marsh Restoration, Rehabilitation, and Creation Techniques, Northern California"

Bachelor of Science (with honors), University of California at Davis, Civil and Environmental Engineering, 1990

Member of the Engineering Honor Society, Tau Beta Pi, 1990

Wetland Habitat Engineering with Ducks Unlimited, Inc.

Regional Engineer (1993-1996), Regional Engineering Supervisor (1996-)

Program Management

Mr. Charney manages the wetland engineering program for the Western Regional Office of Ducks Unlimited, Inc. The Western Regional Office has active wetland restoration projects in 10 states: Alaska, Arizona, California, Hawaii, Idaho, Nevada, New Mexico, Oregon, Utah, and Washington. His responsibilities include supervision of professional engineering staff, program management, contract management, and project evaluation.

Upon his hire, Mr. Charney was responsible for establishing a full service engineering function within the Western Regional Office including the development of an in-house wetland design capability, soil laboratory, Autocad drafting and mapping capability, surveying capability, and other functions typical of a full service engineering program. In addition to program management responsibilities, Mr. Charney has design and construction management responsibility for several large restoration projects that are currently underway in the Western United States.

Partial list of projects with Ducks Unlimited, Inc.:

Stone Lakes NWR, Beach Lake Wetland Restoration and Vyonis Wetland Restoration, California
Design-build responsibility for a 128 acre wetland mitigation bank and habitat complex for the California Transportation Department (\$1.3 million) and 450 acre wetland complex for the USFWS (\$1.2 million).

Yolo Basin Wetlands, California

Design-build responsibility for restoration of a 3400+ acre wetland complex within the Yolo Causeway in Northern California (\$4.8 million) with partners US Army Corps of Engineers and California Department of Fish and Game.

Lower Columbia NAWCA, Oregon & Washington

Design-build responsibility for a series of wetland restorations/enhancements with multiple government partners along the Lower Columbia River on the Oregon/Washington border. (\$1.5 million)

Other Wetland Engineering

Prior to joining Ducks Unlimited, Inc. Mr. Charney planned and designed wetlands for water and wastewater treatment throughout California. Mr. Charney coordinated an advisory committee review of the Everglades Protection Act design for using a 40,000 acre treatment wetland to remove phosphorus from water entering the Everglades National Park in South Florida. As a post-graduate researcher Mr. Charney helped develop methods for restoration of tidal salt marsh habitat along the Northern California Coast.

BIDDER'S BOND

We DUCKS UNLIMITED, INC.
3074 Gold Canal Drive, Rancho Cordova, CA 95670-6116
_____, as PRINCIPAL, and
UNITED PACIFIC INSURANCE COMPANY
Suite 400, 5660 New Northside Drive, Atlanta, GA 30328

as SURETY, are held and firmly bound unto the State of California in the penal sum of TEN PERCENT (10%) OF THE TOTAL AMOUNT OF THE BID of the Principal above named submitted by said Principal to the State of California, acting by and through the Resources Agency, for the work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, to the Secretary of the Resources Agency to which said bid was submitted, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

In no case shall the liability of the surety here under exceed the sum of \$ _____

THE CONDITION OF THIS OBLIGATION IS SUCH,

That whereas the Principal has submitted the above-mentioned bid to the State of California, as aforesaid, for certain construction specifically described for
LONG AMERICAN RIVER WETLAND SLOUGH COMPLEX AND FLOODPLAIN RESTORATION

(copy here The exact description of work, including location, as it appears on the proposal)

NOW, THEREFORE, If the aforesaid Principal is awarded the contract and, within the time and manner required under the specifications, after the prescribed forms are presented to him for signature, enters into a written contract, in the prescribed form, in accordance with the bid, and files ~~two bonds with the Department to guarantee faithful performance and payment for labor and materials~~, as required by law, then this obligation shall be null and void; otherwise, it shall be and remain in full force and virtue.

IN WITNESS WHEREOF, We have hereunto set our hands and seals on this 2nd
day of July, 1998

*A Payment Bond with the Department to guarantee payment for Labor and Materials in the amount of 50% of the contract.

DUCKS UNLIMITED, INC. (Seal)

BY: _____ (Seal)

Principal

UNITED PACIFIC INSURANCE COMPANY (Seal)

BY: Alan J. Wormer (Seal)

Surety

Alan J. Wormer, Attorney-In-Fact (Seal)

Address Suite 400, 5660 New Northside Drive
Atlanta, GA 30328

NOTE: Signatures of those executing for the surety must be properly acknowledged.

SURETY ACKNOWLEDGMENT

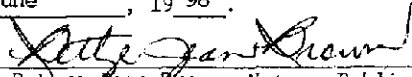
STATE OF TENNESSEE

COUNTY OF DAVIDSON

I, Bettye Jean Brown, a Notary Public in and for the
county and state aforesaid, do hereby certify that Alan J. Wormer
who as Attorney-In-Fact, signed the writing above, or hereto annexed,
for UNITED PACIFIC INSURANCE COMPANY, a corporation, bearing date
of 2nd day of July, 1998, has this day in my said county,
before me, acknowledged the said writing to be the act and deed of said
corporation.

Given under my hand this 30th day of June, 1998.

My Commission Expires 9/18/99


Bettye Jean Brown Notary Public

**RELIANCE SURETY COMPANY
UNITED PACIFIC INSURANCE COMPANY**

**RELIANCE INSURANCE COMPANY
RELIANCE NATIONAL INDEMNITY COMPANY**

ADMINISTRATIVE OFFICE, PHILADELPHIA, PENNSYLVANIA

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that RELIANCE SURETY COMPANY is a corporation duly organized under the laws of the State of Delaware, and that RELIANCE INSURANCE COMPANY and UNITED PACIFIC INSURANCE COMPANY, are corporations duly organized under the laws of the Commonwealth of Pennsylvania and that RELIANCE NATIONAL INDEMNITY COMPANY is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called "the Companies") and that the Companies by virtue of signature and seals do hereby make, constitute and appoint Julie Holland, David E. Armstrong, Alan J. Wormer, Martha Fish, Bettye J. Brown, Richard M. Miller, Jr., of Nashville, Tennessee their true and lawful Attorney(s)-in-Fact, to make, execute, seal and deliver for and on their behalf, and as their act and deed any and all bonds and undertakings of suretyship and to bind the Companies thereby as fully and to the same extent as if such bonds and undertakings and other writings obligatory in the nature thereof were signed by an Executive Officer of the Companies and sealed and attested by one other of such officers, and hereby ratifies and confirms all that their said Attorney(s)-in-Fact may do in pursuance hereof.

This Power of Attorney is granted under and by the authority of Article VII of the By-Laws of RELIANCE SURETY COMPANY, RELIANCE INSURANCE COMPANY, UNITED PACIFIC INSURANCE COMPANY, and RELIANCE NATIONAL INDEMNITY COMPANY which provisions are now in full force and effect, reading as follows:

ARTICLE VII - EXECUTION OF BONDS AND UNDERTAKINGS

1. The Board of Directors, the President, the Chairman of the Board, any Senior Vice President, any Vice President or Assistant Vice President or other officer designated by the Board of Directors shall have power and authority to (a) appoint Attorney(s)-in-Fact and to authorize them to execute on behalf of the Company, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof, and (b) to remove any such Attorney(s)-in-Fact at any time and revoke the power and authority given to them.

2. Attorney(s)-in-Fact shall have power and authority, subject to the terms and limitations of the Power of Attorney issued to them, to execute deliver on behalf of the Company, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof. The corporate seal is not necessary for the validity of any bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof.

3. Attorney(s)-in-Fact shall have power and authority to execute affidavits required to be attached to bonds, recognizances, contracts of indemnity or other conditions or obligatory undertakings and they shall also have power and authority to certify the financial statement of the Company and to copies of the By-Laws of the Company or any article or section thereof.

This Power of Attorney is signed and sealed by authority of the following resolution adopted by the Executive and Finance Committees of the Boards of Directors of Reliance Insurance Company, United Pacific Insurance Company and Reliance National Indemnity Company by Unanimous Consent dated as of February 28, 1994 and by the Executive and Finance Committee of the Board of Directors of Reliance Surety Company by Unanimous Consent dated as of March 31, 1994.

"Resolved that the signatures of such directors and officers and the seal of the Company may be affixed to any such Power of Attorney or any certificates relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company and any such Power so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company, in the future with respect to any bond or undertaking to which it is attached."

IN WITNESS WHEREOF, the Companies have caused these presents to be signed and their corporate seals to be hereto affixed, this April 30, 1998.



RELIANCE SURETY COMPANY
RELIANCE INSURANCE COMPANY
UNITED PACIFIC INSURANCE COMPANY
RELIANCE NATIONAL INDEMNITY COMPANY

David T. Akers

STATE OF Pennsylvania
COUNTY OF Philadelphia

ss.

On this, April 30, 1998, before me, Valencia Wortham, personally appeared David T. Akers, who acknowledged himself to be the Senior Vice President of the Reliance Surety Company, and the Vice President of Reliance Insurance Company, United Pacific Insurance Company, and Reliance National Indemnity Company and that as such, being authorized to do so, executed the foregoing instrument for the purpose therein contained by signing the name of the corporation by himself as its duly authorized officer.

In witness whereof, I hereunto set my hand and official seal.



Valencia Wortham

Notary Public in and for the State of Pennsylvania
Residing at Philadelphia

Official Seal
Valencia Wortham, Notary Public
Philadelphia, Philadelphia County
My Commission Expires Nov. 18, 2000

I, Anita Zippert, Secretary of RELIANCE SURETY COMPANY, RELIANCE INSURANCE COMPANY, UNITED PACIFIC INSURANCE COMPANY, and RELIANCE NATIONAL INDEMNITY COMPANY do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 2nd day of July, 1998.

Anita Zippert

Secretary



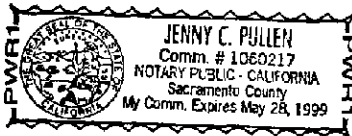
State of California

County of Sacramento

On 7/25/97 before me, Jenny C. Pullen, Notary Public
(DATE) (NAME/TITLE OF OFFICER - e.g. "JANE DOE, NOTARY PUBLIC")

personally appeared Nolly Hopkins Andree
(NAME(S) OF SIGNER(S))

☒ personally known to me -OR- ☐



proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

Witness my hand and official seal.

(SEAL)

Jenny C. Pullen
(SIGNATURE OF NOTARY)

ATTENTION NOTARY

The information requested below and in the column to the right is **OPTIONAL**. Recording of this document is not required by law and is also optional. It could, however, prevent fraudulent attachment of this certificate to any unauthorized document.

THIS CERTIFICATE MUST BE ATTACHED TO THE DOCUMENT DESCRIBED AT RIGHT:

Title or Type of Document Noncollusion Affidavit

Number of Pages 1 Date of Document 7/25/97

Signer(s) Other Than Named Above _____

RIGHT THUMBPRINT (Optional)

TOP OF THUMB HERE

CAPACITY CLAIMED BY SIGNER(S)
☐ INDIVIDUAL(S)
☐ CORPORATE _____

OFFICER(S) _____
(TITLE)
☐ PARTNER(S) ☐ LIMITED
☐ GENERAL
☐ ATTORNEY IN FACT
☐ TRUSTEE(S)
☐ GUARDIAN/CONSERVATOR
☐ OTHER: _____

SIGNER IS REPRESENTING:
(Name of Person(s) or Entity(ies))

RIGHT THUMBPRINT (Optional)

TOP OF THUMB HERE

CAPACITY CLAIMED BY SIGNER(S)
☐ INDIVIDUAL(S)
☐ CORPORATE _____

OFFICER(S) _____
(TITLE)
☐ PARTNER(S) ☐ LIMITED
☐ GENERAL
☐ ATTORNEY IN FACT
☐ TRUSTEE(S)
☐ GUARDIAN/CONSERVATOR
☐ OTHER: _____

SIGNER IS REPRESENTING:
(Name of Person(s) or Entity(ies))



Certificate of Incorporation of DUCKS UNLIMITED, INC.

WE, THE UNDERSIGNED, being all of full age and citizens of the United States and a majority of whom are citizens and residents of the District of Columbia, desiring to form a membership corporation pursuant to and in conformity with Chapter Five of Title Five of the Code of Laws of the District of Columbia, DO HEREBY CERTIFY:

FIRST: The name of the corporation shall be:

DUCKS UNLIMITED, INC.

SECOND: The corporation shall have perpetual existence.

THIRD: The particular business and objects of the corporation are:

To restore and perpetuate wild ducks and other wild waterfowl on the North American continent; to promote, carry on, conduct, and foster scientific research, education, training, and publication in the ornithological sciences; to establish departments of research and scientific study with particular reference to the enhancement of knowledge concerning the waterfowl of the North American continent; to establish, promote, assist, contribute to, or otherwise encourage the study of conservation, restoration, and management of wild waterfowl and its habitat; and in connection therewith, to grant scholarships, prizes and rewards;

To maintain sanctuaries for wild life, and to take, receive, hold, and convey real and personal estate necessary for the purposes of the corporation as stated in this certificate, and other real and personal property the income from which shall be applied to the purposes of the corporation.

In pursuance of, and not in limitation of the general powers conferred by law, and the objects and purposes herein set forth, it is expressly provided that this corporation shall have the following powers:

To do all such acts as are necessary or convenient to attain the objects and purposes herein set forth, to the same extent and as fully as any natural person could or might do, and as are not forbidden by law or by this Certificate of Incorporation or by the By-Laws of this corporation;

To take and hold by bequest, devise, gift, purchase, or lease, either absolutely or in trust, for any of its purposes, any property real or personal, without limitation as to amount of value, except such limitation, if any, as may be imposed by law; to transfer and convey the same, and to invest and re-invest the principal and income thereof, and to deal with and expend the principal and income of the corporation in such manner as in the judgment of the Trustees will best promote its objects; and in order properly to prosecute the objects and purposes as above set forth, the corporation will have full power and authority to purchase, lease, and otherwise acquire, hold, mortgage, convey and otherwise dispose of all kinds of property, both real and personal, both in the District of Columbia, and in any or all of the states of the United States, the territories or colonies of the United States, Alaska, the Dominion of Canada, Newfoundland, Mexico, the Central American countries, and other foreign countries, and colonies or dependencies thereof, and generally to perform all acts which may be deemed necessary for the proper and successful prosecution of the objects and purposes for which this corporation is created.

To have offices and promote and carry on its objects and purposes, within or without the District of Columbia, and in all the states, territories or foreign possessions of the United States, and in foreign countries.

To have all powers that may be conferred upon corporations formed under Chapter Five of Title Five of the Code of Laws of the District of Columbia.

The corporation shall be non-political, shall not promote the candidacy of any person seeking public office; and shall not by its activities, or any substantial part thereof, attempt to influence legislation by propaganda or otherwise.

FOURTH: The corporation shall be without capital stock. All property, real and personal, which the corporation shall receive shall be used exclusively for educational and scientific purposes, including the

restoration and perpetuation of wild ducks and other wild waterfowl on the North American continent; and no part of the income from the same shall inure to the benefit of any private shareholder or individual; provided, however, that reasonable compensation may be paid to an officer, member, or employee for services actually rendered the corporation.

FIFTH: The property of the officers, trustees and members of this corporation shall not be subject to or chargeable with the payment of corporate debts or obligations to any extent whatsoever.

SIXTH: The Board of Trustees shall have the power to make, alter, change, and amend by-laws for the government of the corporation and for the admission and withdrawal of members thereof.

SEVENTH: The meetings of the members and of the Trustees of this corporation may be held in the District of Columbia, or elsewhere within or without the confines of the United States or its possessions.

EIGHTH: The number of Trustees of the first Board of Trustees of this Corporation shall be FIVE, with power to change or increase and add to their number in accordance with provisions of the By-Laws.

The Board of Trustees shall have the power to appoint from their own members an Executive Committee consisting of all of the officers of the corporation including all vice presidents, all living past presidents and such other persons as may be designated by the Board of Trustees, five of whom, or such other number as may be specified by the By-Laws, shall constitute a quorum, who, when the Board of Trustees is not in session, shall have and shall exercise all the powers of the Board of Trustees, unless otherwise provided in the corporation's By-Laws. The Board of Trustees shall elect at its first meeting from its own members a President, and shall appoint a Treasurer and a Secretary and such other officers as may be provided for by the By-Laws, who need not be members of the Board. The Board of Trustees shall at such meeting select from their number, one-fifth of the number thereof to serve for one year, one-fifth to serve for two years, one-fifth to serve for three years, one-fifth to serve for four years, one-fifth to serve for five years; and each subsequent election of Trustees shall be for a period of one year or until their successors are duly elected and qualify. Vacancies occurring by death, resignation, or otherwise shall be filled by the remaining Trustees in such manner as the By-Laws shall prescribe and the persons so elected shall thereupon become Trustees.

NINTH: The names and post-office addresses of the Trustees until the first meeting are:

Arthur M. Bartley
500 Fifth Avenue, New York, N.Y.
Dr. John A. Hartwell
2 East 103rd Street, New York, N.Y.
Newbold L. Herrick
25 Cedar Street, New York, N.Y.
John C. Huntington
500 Fifth Avenue, New York, N.Y.
Wayne Johnson
50 Broadway, New York, N.Y.

TENTH: The Registered Office of this corporation in the District of Columbia shall be at 918-16th Street, N.W., in care of CT Corporation System, the corporation's Registered Agent, Washington, D.C.

WITNESS our hands and seals this 29th day of January One Thousand Nine Hundred and Thirty-Seven.

CHRISTABEL E. HILL

(Witness)

DISTRICT OF COLUMBIA: ss:

ERNEST O. PALAND (SEAL)

WINSTON E. HOBBS (SEAL)

JOSEPH V. McBRIDE (SEAL)

I, CHRISTABEL E. HILL, a Notary Public in and for the District of Columbia, do hereby certify that ERNEST O. PALAND, WINSTON E. HOBBS, and JOSEPH V. McBRIDE, parties to a certificate of incorporation bearing date of January 29th, 1937, and hereto annexed, personally appeared before me in said District, the said ERNEST O. PALAND, WINSTON E. HOBBS and JOSEPH V. McBRIDE being personally known to me as the persons who executed the said certificate of incorporation and acknowledged the same to be their act and deed.

GIVEN under my hand and seal this 29th day of January, 1937.

CHRISTABEL E. HILL

CHRISTABEL E. HILL

Notary Public

Notary Public

DISTRICT OF COLUMBIA

My Commission Expires July 15, 1940

NONDISCRIMINATION COMPLIANCE STATEMENT

STD. 19 (REV. 3-95) FMC

COMPANY NAME

Ducks Unlimited, Inc.

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, disability (including HIV and AIDS), medical condition (cancer), age, marital status, denial of family and medical care leave and denial of pregnancy disability leave.

CERTIFICATION

I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.

OFFICIAL'S NAME

James L. Ware

DATE EXECUTED

PROSPECTIVE CONTRACTOR'S SIGNATURE

Senior Group Manager

PROSPECTIVE CONTRACTOR'S TITLE

Ducks Unlimited, Inc.

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME

EXECUTED IN THE COUNTY OF

PERSONNEL POLICIES AND PRACTICES

EQUAL EMPLOYMENT OPPORTUNITY

Statement of Policy

At Ducks Unlimited, Inc. it is our policy to recruit and hire employees without regard to or discrimination because of age, race, creed, color, national origin, sex, handicap or veteran status. This policy of nondiscrimination applies to all phases of employee relations – hiring, compensation, performance rating, promotion, transfer and other personnel matters.

Our employment objective is to select individuals who meet the organization's high standards of character, education and occupational qualifications; who can carry out the organization's work competently; who have capacity for growth; and, who will become an active part of our organization.

We know that our strength and future growth depend directly upon the contribution made by each person within our organization. Productivity and efficiency result from real job satisfaction and from the opportunity each person has for his or her individual self-development. Our employment policy is designed to:

- Place each employee, insofar as practicable, in a position which best suits the individual's natural and acquired aptitudes and skills.
- Offer each employee opportunity for self-development and advancement through training and on-the-job experience.
- Accord fair and equitable treatment to every employee at all times.
- Recognize the importance of the work of each employee to the overall success of the organization.

SEXUAL HARASSMENT

Statement of Policy

Ducks Unlimited, Inc. maintains a strict policy against sexual harassment. **Simply put, sexual harassment will not be tolerated on the part of any employee.** All employees are responsible for assuring that the workplace is free from sexual harassment. Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature, where:

- Submission to the advances is made either explicitly or implicitly a term or condition of employment.
- Submission to or rejection of the advances is used as the basis for making employment decisions.
- Such conduct interferes with an individual's work performance or creates an intimidating, hostile or offensive working environment.

All employees should avoid any action or conduct that might be viewed as sexual harassment. Approval of, participation in, or acquiescence in conduct constituting sexual harassment will be considered a violation of this policy. If any employee believes that he or she has been subject to sexual harassment at work by anyone, including supervisors, co-workers or visitors, he or she should report this immediately to his or her immediate supervisor or Human Resources. Sexual harassment complaints will be handled with as much confidentiality as possible. There will be no retaliation against any employee who reports a claim of sexual harassment or against any employee who is a witness to the harassment. An immediate investigation will be conducted in an attempt to determine all the facts concerning the alleged harassment. In making this investigation, every effort will be made to be fair to all parties involved. If it is determined that sexual harassment has occurred, corrective action will be taken, up to and including reprimand, discharge, or other appropriate action.

If it is determined that no sexual harassment has occurred, or there is not sufficient evidence to conclude that harassment has occurred, this determination will be communicated to the employee who filed the complaint.

DRUG FREE WORKPLACE PROGRAM

Statement of Policy

Because substance abuse poses a serious threat to our employees, their families and to the entire organization, Ducks Unlimited has established this policy in an effort to promote and maintain a drug-free work environment.

The ultimate goal of this policy, however, is to balance respect for individual privacy with the organization's need to maintain a safe, productive, drug-free work environment for all employees; maintain safety and security at DU's community-based events, as well as at the facilities and properties in the communities where we are located; and, provide a quality of service to the organization's members, as well as non-members and visitors, in a fashion consistent with the high standards set by the Board of Directors of Ducks Unlimited, Inc.

Standard of Conduct

As a Standard of Conduct for employees of Ducks Unlimited, employees will not be permitted to possess, consume, or distribute drugs, controlled substances or abuse alcohol in the workplace or report to work or perform their duties under the influence of alcohol or with drugs present in their system. To allow otherwise jeopardizes the safety of our fellow employees, our members, our facilities, and the communities which we rely upon for support. Any employee determined to be in violation of this policy or standard will be subject to disciplinary action, which may include termination, even for the first offense.



MEMORANDUM

TO: Karen Troedsson
Ducks Unlimited, Ltd.

FROM: Bettye J. Brown
Bond Department

PHONE: 615-872-3720
FAX: 615 872-3899

**WILLIS CORROON
CORPORATION**
26 Century Boulevard
P.O. Box 305025
Nashville, TN 37230-
5025

DATE: June 30, 1998

Re: Bid Bonds

Three (3) Bid Bonds are enclosed, as requested. Please send Bid Results when you have them, and Good Luck with your bids. Thank you.

WILLIS CORROON
Corporation of Tennessee
Nashville Office

Drug and Alcohol Abuse Screening/Testing

Ducks Unlimited recognizes that carefully selected tests and testing procedures have a proper role in any comprehensive substance abuse program, as do properly conducted searches of the effects, vehicles and persons of employees, contractors or visitors.

• Job Applicants

As a condition of regular employment all applicants must complete a drug screen test. If test results are confirmed positive, the employment offer will be withdrawn.

• Current Employees

The Company utilizes screening practices to identify employees who use illegal drugs or abuse alcohol. It is a condition of continued employment for all employees to submit to a drug screen test when:

- a. there is sufficient cause to believe an employee is under the influence of alcohol or has drugs present in their system; or,
- b. there is any mishap or accident involving an employee during business hours or while on Company business in which injury to individuals or damage to property occurs as a result of the impaired employee's involvement.

Failure to submit to required medical or physical examinations/tests is considered misconduct, and as such, grounds for disciplinary action, including termination.

General Procedures

Any employee reporting for work visibly impaired is unable to properly perform required duties and will not be allowed to work. If, in the opinion of the employee's supervisor the employee is considered impaired, the employee will be transported by taxi or an alternative safe transportation mode to his/her home or a medical facility. **An impaired employee will not be allowed to operate or drive any vehicle during business hours or while on official Company business, or any vehicle rented, leased, owned or otherwise intended for Company use or business.**